Appendix H. Glossary

ASSET PERFORMANCE SYSTEM (APS)

Computer system developed by the department to manage various division contract agreements, securities, improvements, and product assets of the department. Replaces AIMS.

BIOLOGICAL DIVERSITY (BIODIVERSITY)

The relative degree of abundance of wildlife species, plant species, communities, habitats or habitat features in an area.

BIODIVERSITY PATHWAYS

An approach to achieving goals of biodiversity conservation which is "the management of human interactions with the variety of life forms and ecosystems so as to maximize the benefits they provide today and maintain their potential to meet future generations needs and aspirations" (Reid W.V. and K.R. Miller, 1989, Keeping options alive: the scientific basis for conserving biodiversity. World Resources Institute, Washington, D.C.). The term "biodiversity pathways" was popularized by Andy Carey, a United States Department of Agriculture Forest Service Pacific Northwest Research Station scientist in the Washington Forest Landscape Management Project (Carey et al., 1996) as an approach that employs traditional silvicultural techniques and field craft and applies them to specific forest management unit objectives of biodiversity and habitat conservation while also incorporating revenue generation. The concept of biodiversity pathways conveys that forest stands evolve by events, or absence of events, and are otherwise constrained only by site productivity potential. Absent human influence, such events occur by chance; in managed stands they occur largely by design. For example, a given forest management unit objective, such as habitat for the northern spotted owl, may take anywhere from less than a century to upwards of a millennium to develop along chance-driven natural pathways. This spectrum of possible pathways ensues from circumstances associated with stand origin (fire, wind, snags and down logs, seed-fall, species, etc.) and stand development (spot fires, wind, insects, disease, pre-European human intervention, etc.). The time required to attain functioning habitat may often be considerably reduced if developed and managed by design rather than by chance-driven events. Thus, biodiversity pathway and silvicultural prescription concepts may be considered too largely synonymous in their application and meaning. A silvicultural prescription is the optimal pathway, within nature's limits, to attain forest management unit objectives; it employs accelerated means (planting, vegetation management, and thinning) to guide stand development along the desired pathway. (Variable density thinning is an activity

that accelerates biodiversity pathway prescriptions towards achieving spotted owl habitat.)

BOG

A hydrologically isolated, low nutrient wetland that receives its water from precipitation only. Bogs typically have no inflow and rarely have outflows. Bogs have peat soils 16 or more inches in depth (except where over bedrock), and specifically adapted vegetation, such as sphagnum moss, Labrador tea, bog laurel, sundews, and some sedges. Bogs may have an overstory of spruce, hemlock, cedar or other tree species, and may be associated with open water.

CLEAN WATER ACT (WATER POLLUTION CONTROL ACT AMENDMENTS OF 1972 AND CODIFIED AS 33 U.S.C. 1251 ET SEQ.)

A federal statute that regulates water quality standards, planning for water pollution control and pollution discharge. Washington's Forest Practices Rules (WAC 222-22) are constructed accordingly.

CLEARCUT

As defined in state Forest Practices Rules (WAC 222-16-010) is a harvest method in which the entire stand of trees is removed in one timber harvesting operation. For purposes of trust forestland management, a clearcut remains such until stocked in accordance with the silvicultural prescription and free-to-grow.

DESIRED FUTURE CONDITION

According to state forest practices rules (WAC 222-16-010), is a reference point on a pathway and not an endpoint for stands and implies the stand conditions of a mature riparian forest at 140 years of age, the midpoint between 80 and 200 years. Where basal area is the only stand attribute used to describe 140-year old stands, these are referred to as the "target basal area."

DESIRED FUTURE/FOREST CONDITION

A variation of desired future condition which, for purposes of silvicultural prescriptions, is used to illustrate a visionary, un- or partly defined end state as contrasted with a completely defined forest management unit objective, i.e., threshold targets are either lacking or incomplete.

DOWN WOODY DEBRIS

Large pieces of wood in stream channels or on the ground such as logs, pieces of logs and large chunks of wood; provides streambed stability and/or habitat complexity, also called coarse woody debris or large woody debris. Large organic debris is large woody debris, but may contain additional non-woody debris, such as animal carcasses.

ECOREGION

A relatively large area of land or water that contains a geographically distinct assemblage of natural communities with similar broad ecological patterns in vegetation, soils, geology, hydrology, landforms and natural disturbances, such as fire.

ENDANGERED SPECIES

Any species of plant or animal defined through the Endangered Species Act of 1973 as being in danger of extinction throughout all or a significant portion of its range, and published in the Federal Register.

ENDANGERED SPECIES ACT

The federal Endangered Species Act of 1973 (U.S.C. §1531 et seq.), as amended, is the federal statute that establishes processes by which plant and animal species are designated as threatened or endangered. Two federal agencies, the United States Fish and Wildlife Service and the National Oceanic and Atmospheric Administration-Fisheries Service (the Federal Services), administer this law. Once a species is listed, the act provides that these agencies develop recovery plans for the species, including conserving the ecosystems on which listed species depend. The department's *Habitat Conservation Plan* is an example of such a recovery plan.

ENVIRONMENTAL IMPACT STATEMENT

A document prepared under the National Environmental Policy Act or State Environmental Policy Act to assess the effects that a particular action will have on the environment.

FEN

A peat-accumulating wetland that receives some drainage from surrounding mineral soils and usually supports marshlike vegetation including sedges, rushes, shrubs and trees. Note: fens are less acidic than bogs and derive most of their water from groundwater rich in calcium and magnesium.

FOREST PRACTICES ACT OF 1974

A Washington State statute (chapter 76.09 RCW) the result of which is comprehensive statewide rules (WAC 222) that establish minimum standards for forest practices on both state and private forestlands, and provides for the necessary administrative procedures and rules applicable to activities conducted on or pertaining to forests on both state-managed and private lands. The act commissioned the Forest Practices Board to promulgate these rules.

FOREST MANAGEMENT UNITS

A forest area designated for management to produce a future stand that will attain a specific set of forest management unit objectives that are consistent with department policy. The boundary of a forest management unit is determined by a variety of factors such as operability limitations as well as bio-physical factors that collectively constitute attributes expressed as forest stands. At the time a forest management unit is defined, it may be a part or all of an existing Forest Resource Inventory System sample unit (forest inventory unit), or it may contain parts of several existing forest inventory units, so long

as the ecological conditions are sufficiently similar to attain the forest management unit's objectives at essentially the same time throughout the forest management unit. A forest management unit is generally identical with the new stand and is the unit of land for which the final silvicultural prescription is developed.

FUEL LOADING

A buildup of forest fuels, especially large expanses of live overstocked stands, and dead and down forest fuels that can generate tremendous thermal outputs during a wildfire, posing a severe problem for firefighters even with high humidities and lower temperature. Under adverse fire weather, high live fuel loading and down dead fuel make for extreme resistance to control. Fuel loading is normally quantified as tons per acre.

GENE POOL

The totality of all alleles of all genes of all individuals in a particular population.

GENE POOL RESERVES

A stand that has been removed from the commercial forest base to conserve native genetic material well-adapted to local conditions for the future.

GREEN-UP

A department trust forest land policy instituted by the Board of Natural Resources that requires even-aged final harvest forest management units to be less than 100 acres and be separated by mature forest buffers at least 300 feet wide, in addition to riparian management zones and their site-specific extensions.

GROUNDWATER

Water that is beneath the land surface. The source of seeps, springs and wells.

HABITAT CONSERVATION PLAN

An implemental program for the long term protection and benefit of a species in a defined area; required as part of a Section 10 incidental taking permit application under the federal Endangered Species Act. The department has a *Habitat Conservation Plan* signed in 1996 in agreement with the United States Fish and Wildlife Service and National Oceanic and Atmospheric Administration-Fisheries. The plan covers approximately 1.6 million acres of state trust lands managed by the department within the range of the northern spotted owl.

NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION-FISHERIES

The federal agency that is the listing authority for marine mammals, anadromous fish and other marine species under the federal Endangered Species Act.

NATURAL AREA PRESERVES

Under authority of the state Natural Area Preserves Act of 1972 (codified in RCW 79.70), Natural Area Preserves are established on department lands to protect the best remaining examples of many ecological communities, including rare plant and animal habitat. The Natural Area Preserves network represents a legacy for future generations and helps ensure that blueprints of the state's natural ecosystems are protected forever. Areas in the network include five large coastal preserves supporting high quality wetlands, salt marshes, and forested buffers. Other habitats include mounded prairies, sphagnum bogs, natural forest remnants and grassland balds. In size, they range from eight to 3,500 acres. Natural Area Preserves and Natural Resources Conservation Areas are managed by the department under the Natural Heritage Program.

NATURAL RESOURCES CONSERVATION AREAS

Codified in 1987 in RCW 79.71 to protect outstanding examples of native ecosystems; habitat for endangered, threatened and sensitive plants and animals and scenic landscapes. The Natural Resources Conservation Areas Program represents a protection alternative to compliment Natural Area Preserves. Habitats protected in Natural Resources Conservation Areas include coastal and high elevation forests, alpine lakes, wetlands, scenic vistas, nesting birds of prey, rocky headlands and unique plant communities that provide critical habitat for many plant and animal species, including rare species. Natural Resources Conservation Areas also protect geologic, cultural, historic and archeological sites. Twenty-eight sites total approximately 86,550 acres on department-managed lands in Washington. Natural Area Preserves and Natural Resources Conservation Areas are managed by the department under the Natural Heritage Program.

OFFICE OF ARCHAEOLOGICAL AND HISTORIC PRESERVATION

The Washington State Office of Archaeology and Historic Preservation is Washington State's primary agency with knowledge and expertise in historic preservation. The Office of Archaeology and Historic Preservation maintains information on over 20,000 archaeological sites and over 100,000 historic properties.

OMNIBUS ENABLING ACT

The federal statute that in 1889 granted statehood to Washington. The act contains, among other provisions, the granting of specified sections of land to the state to be used for the benefit of all citizens of the state. These lands became, through the state’s Constitution and subsequent statutes, the basis for grant lands to be managed in trust for benefit of schools, universities and other public institutions. The Enabling Act also placed limits on the sale, lease and management of these lands.

RIPARIAN MANAGEMENT ZONE

A specified area around streams of Type 1-4 where specific measures are taken to protect the stream and its functions. The riparian management zone consists of the stream, the adjacent riparian buffer and, where appropriate, a wind buffer to protect the integrity of the managed riparian buffer. The riparian buffer has been designed to maintain/restore riparian processes that influence the quality of salmonid habitat and to contribute to the conservation of other aquatic and riparian obligate species. Consideration was given to

water temperature, stream bank integrity, sediment load, detrital nutrient load, and large woody debris. The buffers vary according to stream type, location of the flood plain, windthrow, and stream width.

SALMON RECOVERY FUNDING BOARD

In 1999, the Legislature created the Salmon Recovery Funding Board. Composed of five citizens appointed by the Governor and five state agency directors, the board brings together the experiences and viewpoints of citizens and the major state natural resource agencies. The board provides grant funds to protect or restore salmon habitat and assist related activities. It works closely with local watershed groups known as lead entities. SRFB has helped finance over 500 projects. All meetings are open to the public.

SEED ZONES

A designated area, usually with definite topographic bounds, climate, and growing conditions, containing trees with relatively uniform genetic (racial) composition as determined by progeny testing various seed sources."

SILVICULTURE

The art and science of cultivating forests to achieve objectives. This concept incorporates theory, planning and practice.

SNAG

A standing dead tree.

STATE ENVIRONMENTAL POLICY ACT (CHAPTER 43.21C RCW)

This law is the basic state statute for protection of the environment. The State Environmental Policy Act requires all state agencies to consider and analyze all significant environmental impacts of any action proposed by those agencies; to inform and involve the public in the agencies' decision-making processes; and to consider the environmental impacts in the agencies' decision-making processes.

TRADITIONAL CULTURAL PROPERTIES

Specific geographic areas that are associated with cultural practices or beliefs of a living community that are rooted in that community's history and that are important in maintaining the continuing cultural identity of the community.

TRAX

Total Resource Application Cross-Reference System developed by the department. Information includes timber sales, Application Information and Management System, archaeological-historical sites, Washington State Department of Ecology water rights and Natural Heritage sites.

WATERSHED ADMINISTRATIVE UNIT

The basic hydrologic unit used for watershed analysis. According to WAC 222-22-020, the department, in cooperation with the Washington State Departments of Ecology and Fish and Wildlife, federally-recognized Tribes, local government entities, forest

landowners and the public, defines and maps watershed administrative units throughout the state. Watershed administrative units should be generally between 10,000 to 50,000 acres in size and should be discrete hydrologic units.

WETLANDS

Areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions such as swamps, bogs, fens and similar areas.